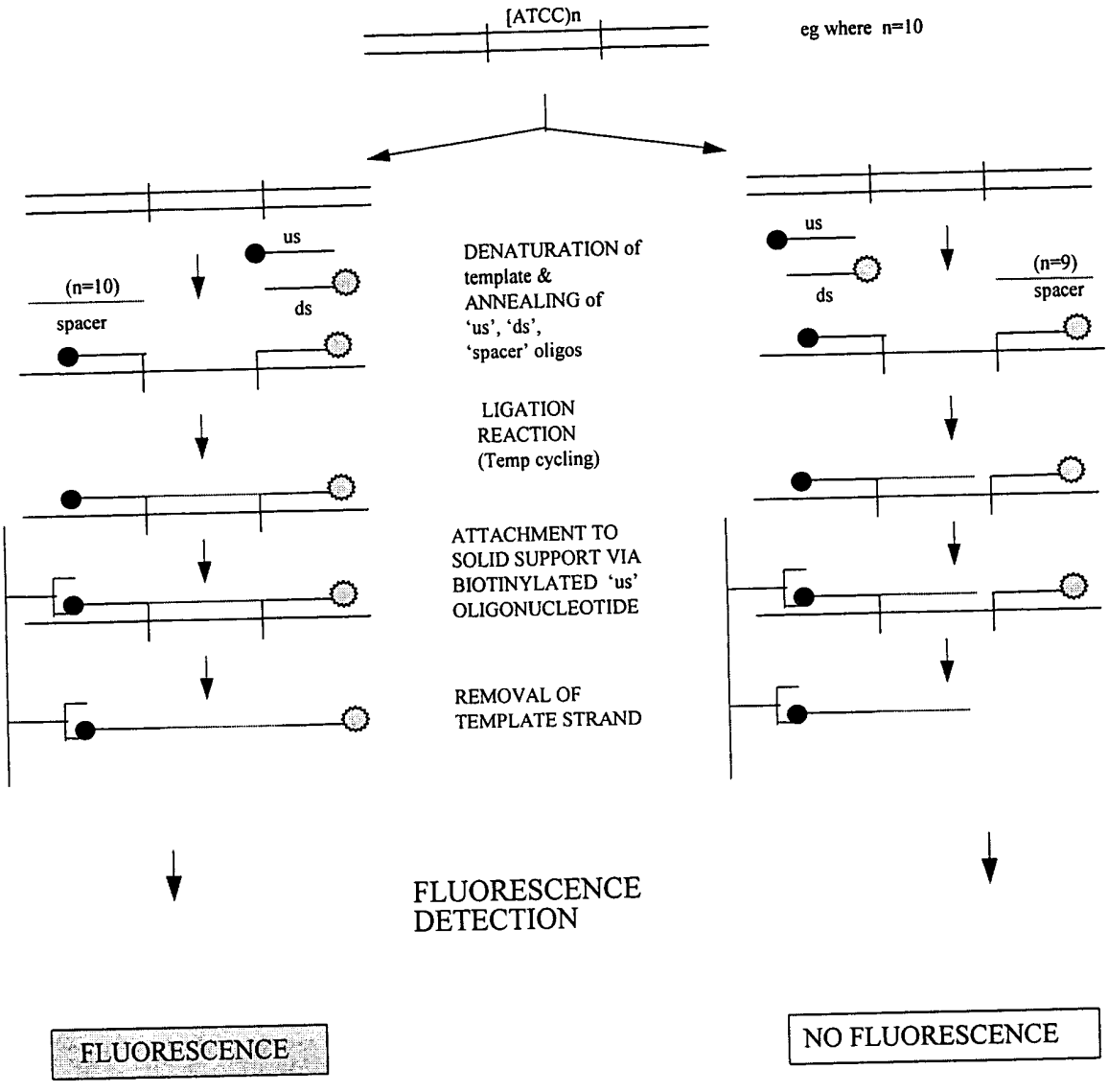

[ATCC)n
eg where n=10
us
(n=10)
spacer
ds
DENATURATION of
template &
ANNEALING of
'us', 'ds',
'spacer' oligos
us
ds
(n=9)
spacer
LIGATION
REACTION
(Temp cycling)
ATTACHMENT TO
SOLID SUPPORT VIA
BIOTINYLATED 'us'
OLIGONUCLEOTIDE
REMOVAL OF
TEMPLATE STRAND
FLUORESCENCE
DETECTION
FLUORESCENCE
NO FLUORESCENCE

Figure 1

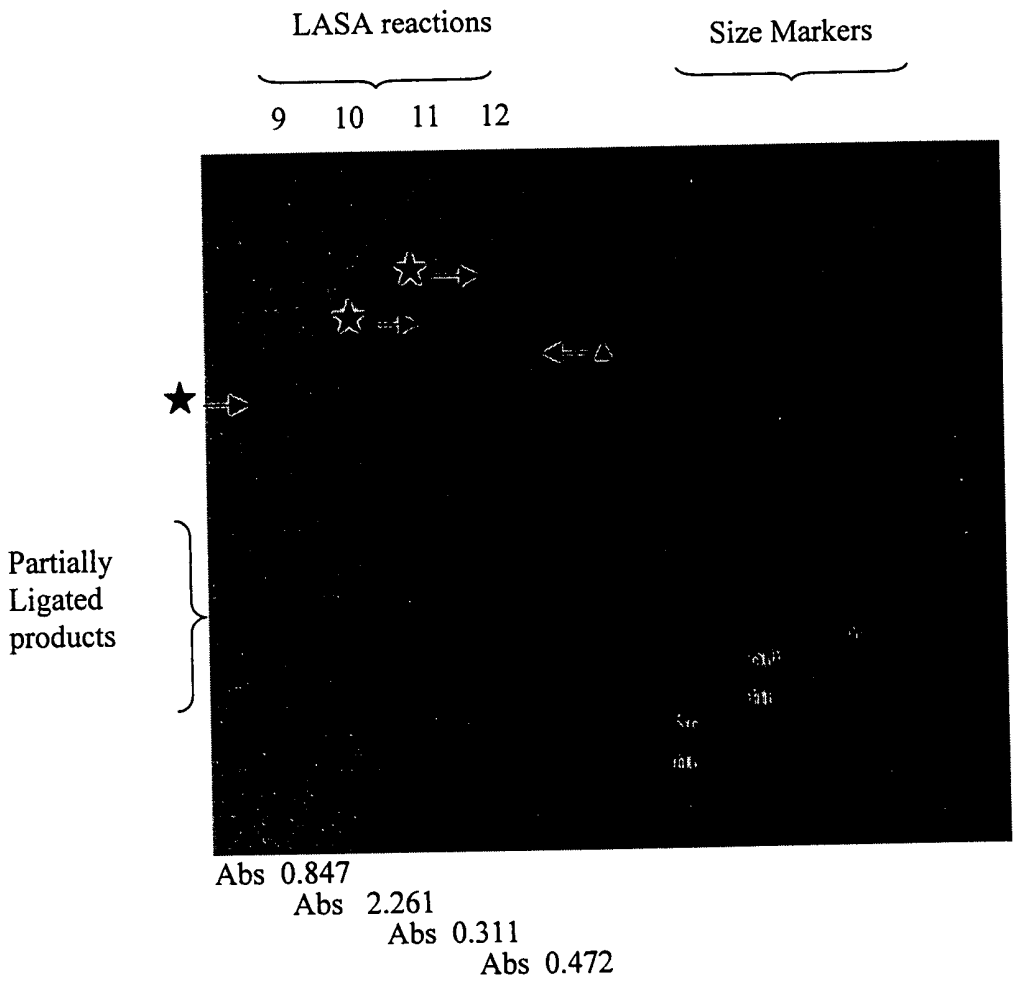

LASA reactions
Size Markers
9
10
11
12
Partially Ligated products
Abs 0.847
Abs 2.261
Abs 0.311
Abs 0.472

Figure 2

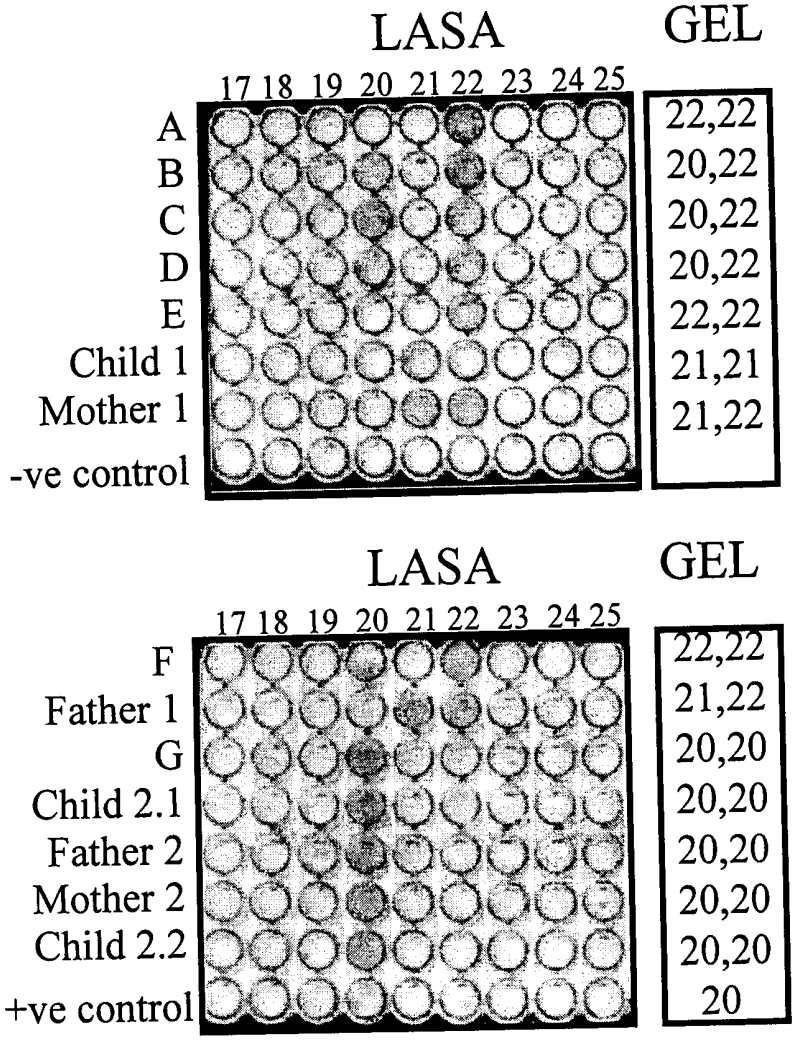

LASA
GEL
17 18 19 20 21 22 23 24 25
A
B
C
D
E
Child 1
Mother 1
-ve control
22,22
20,22
20,22
20,22
22,22
21,21
21,22
LASA
GEL
17 18 19 20 21 22 23 24 25
F
Father 1
G
Child 2.1
Father 2
Mother 2
Child 2.2
+ve control
22,22
21,22
20,20
20,20
20,20
20,20
20,20
20

Figure 3

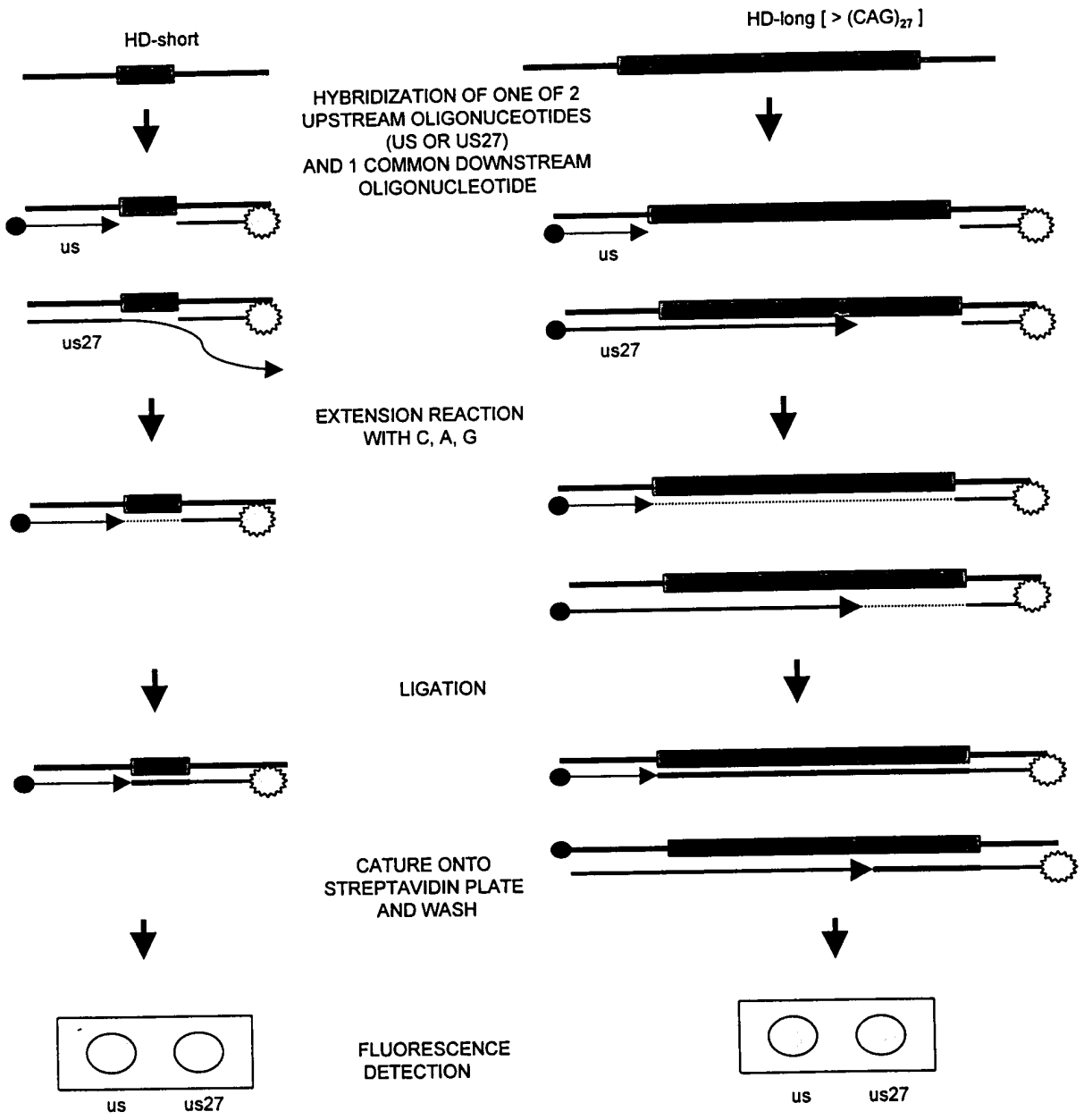
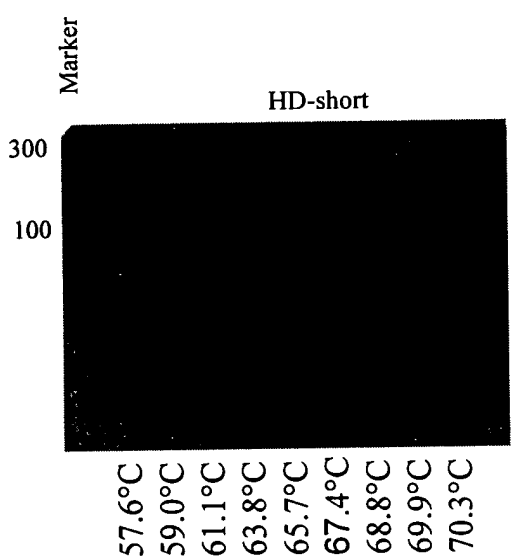

HD-short
HD-long [> (CAG)27]
HYBRIDIZATION OF ONE OF 2 UPSTREAM OLIGONUCEOTIDES (US OR US27) AND 1 COMMON DOWNSTREAM OLIGONUCLEOTIDE
us
us27
us
us27
EXTENSION REACTION WITH C, A, G
LIGATION
CATURE ONTO STREPTAVIDIN PLATE AND WASH
FLUORESCENCE DETECTION
us
us27
us
us27

Figure 4



Temperature titration

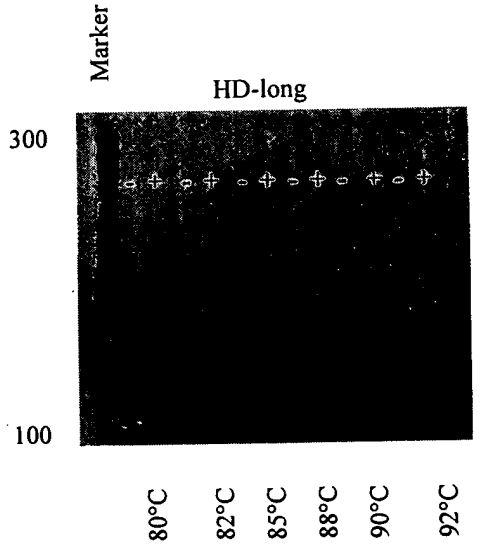


Figure 5A

Figure 5B

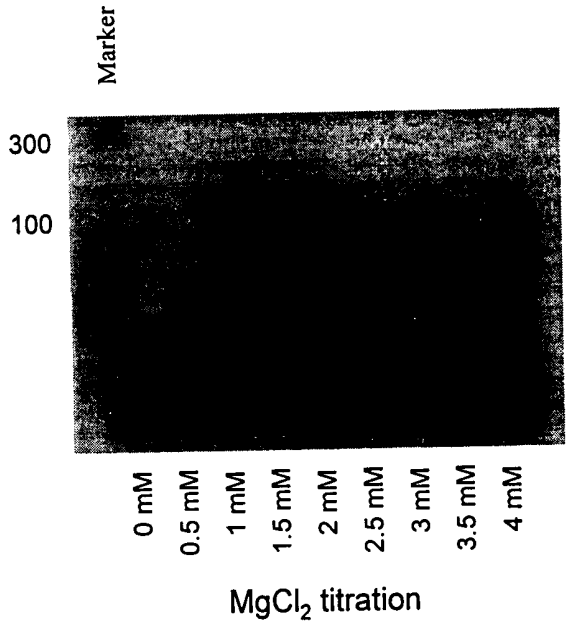


Figure 5C

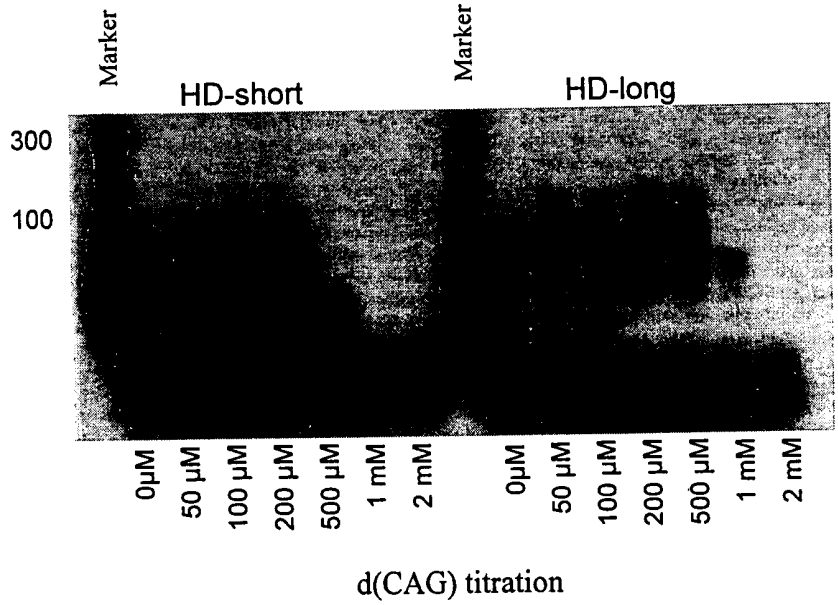


Figure 5D

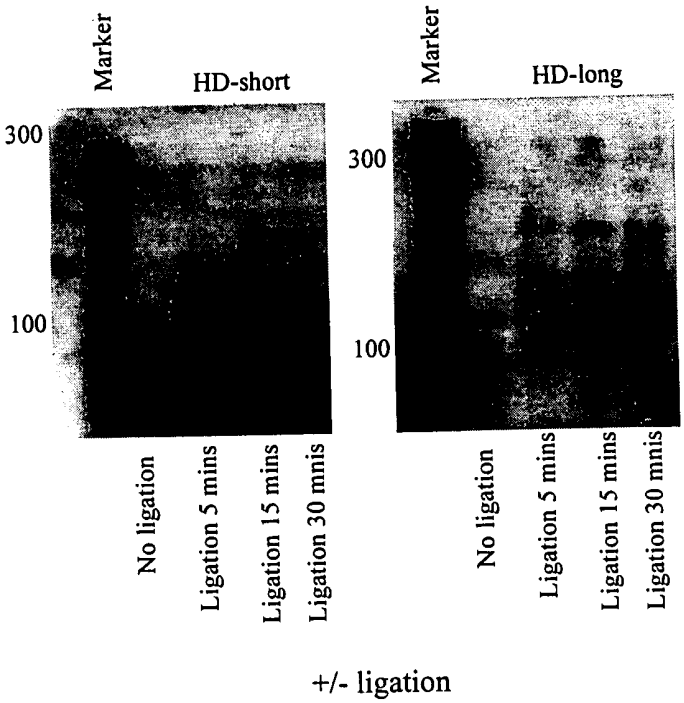

Marker
HD-short
300
100
No ligation
Ligation 5 mins
Ligation 15 mins
Ligation 30 mnis
Marker
HD-long
300
100
No ligation
Ligation 5 mins
Ligation 15 mins
Ligation 30 mnis
+/- ligation

Figure 5E

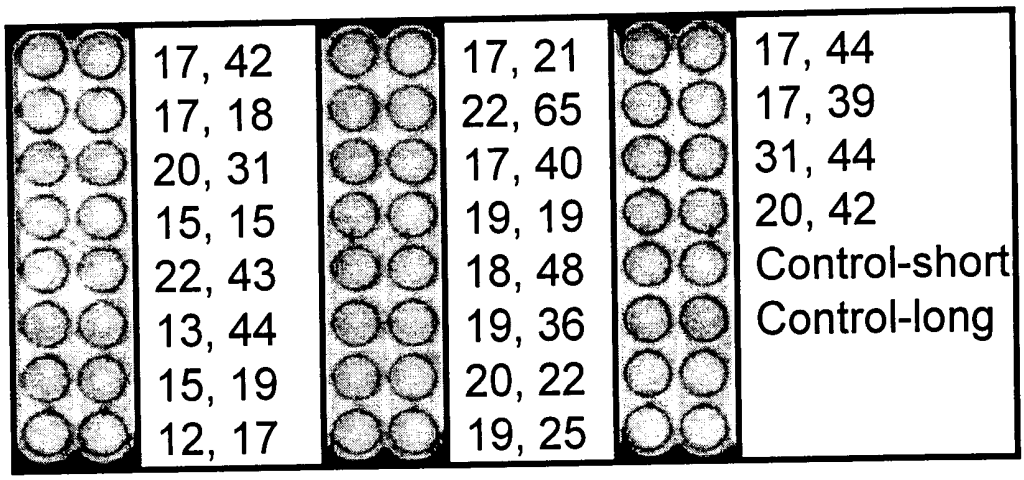

17, 42
17, 18
20, 31
15, 15
22, 43
13, 44
15, 19
12, 17
17, 21
22, 65
17, 40
19, 19
18, 48
19, 36
20, 22
19, 25
17, 44
17, 39
31, 44
20, 42
Control-short
Control-long

Figure 6